



**North American**  
**ADHESIVES®**

# NA 3240

# Multi Flex™ Rapid

## Fast-Set Polymer Thin-Set Mortar



### PRODUCT DESCRIPTION

NA 3240 Multi Flex Rapid is an improved-performance, single-component, polymer-fortified, fast-setting thin-set mortar for most interior and exterior installations of tile and stone. This mortar contains a higher amount of dry polymer, that when mixed with water provides an improved bond between tile or stone over a wider variety of substrates in residential and commercial installations. NA 3240 Multi Flex Rapid's fast-setting property allows tile to be grouted after 2 to 3 hours, making this mortar ideal for tile projects that must be done quickly. NA 3240 Multi Flex Rapid meets or exceeds ANSI A118.4F, ANSI A118.11 and ANSI A118.15F requirements for fast-setting mortars when mixed with water.

### USES

- For setting most ceramic, ceramic mosaics, porcelain, quarry, paver and Saltillo tiles, and many types of marble, granite and natural stone
- For residential indoor and outdoor floor, wall and countertop installations
- For commercial indoor floor and wall, and outdoor floor installations
- Higher polymer content allows tile over existing tile installations.

### SUBSTRATE REQUIREMENTS

Substrates must be in accordance with ANSI A108.5 current standards and recommendations. All supporting surfaces must be structurally sound. The surface area that will receive tile must be dry, clean and free of dust, oil, grease, tar, paint, wax, curing agents, primers, sealers, release agents, existing adhesives and any other substance that can weaken the adhesive's bond to the substrate. If the surface contains these substances, they must be mechanically removed.

### Tile Council of North America (TCNA) Statement on Deflection Criteria

Floor systems, including the framing system and subfloor panels, over which tile will be installed should be in conformance with the IRC [International Residential Code] for residential applications, the IBC [International Building Code] for commercial applications, or applicable building codes.

Note: The owner should communicate in writing to the project design professional and general contractor the "intended use" of the tile installation, in order to enable the project design professional and general contractor to make necessary allowances for the expected live load, concentrated loads, impact loads, and dead loads including the weight of the tile and setting bed. The tile installer shall not be responsible for any floor framing or subfloor installation not compliant with applicable building codes, unless the tile installer or tile contractor designs and installs the floor framing or subfloor.

Consult Technical Services for installation recommendations regarding substrates and conditions not listed.

### SUITABLE SUBSTRATES (properly prepared)

- Fully cured concrete (cured at least 28 days)
- Cement backer units – see manufacturer's installation guidelines
- Cement mortar beds and leveling coats
- Masonry block and brick
- Gypsum wallboard, properly primed (interior walls in dry areas only)
- APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial in dry conditions only)
- North American Adhesives (NAA) waterproofing, crack-isolation and sound-reduction membranes over recommended substrates
- Properly prepared vinyl composition tile (VCT), plastic laminate countertops and old, dry cutback adhesive residue (interior only)
- Properly prepared existing ceramic and porcelain tile, cement terrazzo, quarry tile and pavers (interior only)
- All substrates must be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent proper adhesion.

See NAA's "Surface Preparation Requirements" document at [www.na-adhesives.com](http://www.na-adhesives.com).

# NA 3240

# Multi Flex™ Rapid

## LIMITATIONS

- Install only at temperatures between 40°F and 95°F (4°C and 35°C).
- Not recommended for:
  - Application over presswood, particleboard, chipboard, oriented strand board (OSB), hardwood flooring, Masonite, Luan, substrates containing asbestos, metal or dimensionally unstable materials.
  - Setting moisture-sensitive stone (green marble, some limestones and granites), agglomerate tiles or resin-backed tiles. Instead, use a suitable epoxy or urethane adhesive.
  - Use on exterior commercial building facades, such as shopping malls, office buildings, high-rise residential units, etc.
  - Use in areas of prolonged water immersion (swimming pools, spas, steam rooms, gang showers, hot tubs, fountains).
- To use directly over gypsum-based patching or leveling substrates, apply suitable primer before use.
- Do not spread more material than can be tiled over before ridges skin over.
- For light-colored and translucent natural stone, a white mortar is recommended.
- Product has about 30 minutes of working time after mixing.
- For areas subject to severe freeze/thaw conditions, mix *NA 3000* additive with an appropriate thin-set mortar.

## MIXING

Consult the Safety Data Sheet for safe-handling instructions.

1. Into a clean mixing container, pour about 5 to 6 U.S. qts. (4,73 to 5,68 L) of clean potable water. Gradually add 50 lbs. (22,7 kg) of powder while slowly mixing.
2. Use a low-speed mixing drill (at about 300 rpm), with an angled cross-blade mixer or double-box mixer. Mix thoroughly for about 5 minutes and until mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.
3. Do not let mixture stand (“slake”). Instead, spread immediately.
4. If mixture becomes heavy or stiff, remix without adding more liquid or powder.

## APPLICATION

1. Choose a typical notched trowel (see chart) with sufficient depth to achieve more than 80% mortar contact to both the tile and substrate for all interior applications, and more than 95% for exterior installations,

commercial floor and wet applications. It may be necessary to back-butter the tile in order to meet these requirements. (Refer to ANSI A108.5 specifications and TCNA handbook guidelines.)

2. With pressure, apply a coat by using the trowel’s flat side to key mortar into the substrate.
3. Apply additional mortar, combing it in a single direction with the trowel’s notched side.
4. Spread only as much mortar as can be tiled before product skins over. Open time can vary with jobsite conditions.
5. Place the tiles firmly into the wet mortar. Push the tiles back and forth in a direction perpendicular to trowel lines, to collapse the mortar ridges and to help achieve maximum coverage. Ensure proper contact between mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage.
6. Remove excess mortar from the joint areas so that at least 2/3 of the tile depth is available for grouting (see ANSI A108.10 guidelines).

## GROUTING

- Wait 2 to 3 hours before grouting with an appropriate NAA grout.

## MOVEMENT JOINTS

- Provide for movement joints where specified. Refer to the most current TCNA handbook for ceramic tile installation, Detail EJ-171.
- When necessary, cut tiles along both edges of the expansion joints. Do not allow tile and mortar to overlap the joints.
- Protect tilework with metal strips (edge metal) along both edges of structural building expansion joints.
- Install the specified compressible backer rod and sealant into all expansion and control joints.

## CLEANUP

- Clean tools, tile or other surfaces with water while mortar is fresh.

## PROTECTION

- Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.
- Protect from foot traffic for 6 hours. Protect from heavy traffic for 24 hours. Protect from frost and rain for 7 days.
- Because temperature and humidity (during and after the installation of tile) affect the final curing time, allow for extended periods of cure and protection when temperatures drop below 60°F (16°C) and/or when the relative humidity is higher than 70%.



<b>Product Characteristics</b> at 73°F (23°C) and 50% relative humidity	
Colors	Gray; white
Packaging	
Bag: Gray, 25 lbs. (11,3 kg)	Product code #324025000
Bag: Gray, 50 lbs. (22,7 kg)	Product code #324050000
Bag: White, 50 lbs. (22,7 kg)	Product code #324050001
VOCs (Rule #1168 of California's SCAQMD)	0 g per L
Shelf life	1 year
Open time*	10 to 20 minutes
Pot life*	30 minutes
Time before grouting*	2 to 3 hours
Cleanup	With clean water while fresh

\* Open time, pot life and time before grouting vary based on jobsite conditions.

<b>Industry Standards and Approvals</b>	
LEED v3 Points Contribution	LEED Points
MR Credit 5, Regional Materials**	Up to 2 points
IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants	1 point
IEQ Credit 4.3, Low-Emitting Materials – Flooring Systems	1 point

\*\* Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

<b>ISO 13007 Classification</b>	
Classification Code	Classification Requirement
C2 (cementitious, improved adhesion)	≥ 145 psi (1 MPa) after standard aging, heat aging, water immersion and freeze/thaw cycles
F (fast-setting)	≥ 72.5 psi (0,5 MPa) after 6 hours
P1 (normal adhesion to plywood)	≥ 72.5 psi (0,5 MPa)

<b>ANSI Specification***</b>		
Test Method	Specification Standard	Test Results
ANSI A118.11 – shear strength, quarry tile to plywood	> 150 psi (1,03 MPa) at 28 days	200 to 325 psi (1,38 to 2,24 MPa)
ANSI A118.15F – shear strength, impervious ceramic (porcelain) mosaics	> 50 psi (0,34 MPa) at 4 hours	Pass
ANSI A118.15 – shear strength, impervious ceramic (porcelain) mosaics	> 400 psi (2,76 MPa) at 28 days	485 to 625 psi (3,34 to 4,31 MPa)
ANSI A118.15 – shear strength, glazed wall tile	> 450 psi (3,10 MPa) at 7 days	485 to 600 psi (3,34 to 4,14 MPa)
ANSI A118.15 – shear strength, quarry tile to quarry tile	> 150 psi (1,03 MPa) at 28 days	550 to 750 psi (3,79 to 5,17 MPa)

\*\*\* Anything that meets A118.15 by definition meets or exceeds A118.4.

<b>Approximate Coverage<sup>†</sup></b> per 50 lbs. (22,7 kg)	
Typical Trowel	Coverage
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm), square-notched	75 to 90 sq. ft. (6,97 to 8,36 m <sup>2</sup> )
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm), square-notched	55 to 65 sq. ft. (5,11 to 6,04 m <sup>2</sup> )

<sup>†</sup> Coverage shown is for estimating purposes only. Actual coverage depends on substrate profile and porosity, equipment used, thickness applied, temperature and humidity.

# NA 3240

# Multi Flex™ Rapid



**North American**  
**ADHESIVES®**

MAPEI® Corporation  
1144 East Newport Center Drive  
Deerfield Beach, FL 33442

**U.S. and Puerto Rico**

Customer Service: 1-800-747-2722  
Technical Services: 1-800-637-7753

© 2016 MAPEI Corporation  
All Rights Reserved.  
Printed in the USA.  
Edition Date: September 6, 2016  
**Canada**  
1-844-410-1212

Refer to the Safety Data Sheet for specific data related to health and safety as well as product handling. For the most current product data and warranty information, visit [www.na-adhesives.com](http://www.na-adhesives.com).



**Statement of Responsibility**

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

PR: 5357 MKT: 16-2016